

**Practice: 666 - Forest Stand Improvement**  
**Scenario # 1    Forest Stand Improvement - Light**

**Scenario Description:** **Missouri**

All materials and labor required to manipulate species composition, stand structure and stocking on forestland. Light forest stand improvement will: Reduce basal area by 20 - 29 square feet per acre (or) Cut and/or kill 100 - 199 trees per acre (or) Release 10 - 20 crop trees per acre and/or kill any vines growing on crop trees by an approved method such as "cut stump" with herbicide to prevent resprouting. Use a current and approved Forest Managment Plan for estimated basal area to be removed, number of trees needing to be cut and/or killed, crop trees needing to be released, and/or vines needing killed.

**Before Practice Situation:**

Forest stand is slightly overstocked and/or composed of some undesirable species due to lack of forest management. This has negatively impacted forest health, productivity, and/or sustainability. Wildlife habitat,such as hard and soft mast production, browse, nesting cover, bedding areas, etc. is lacking.

**After Practice Situation:**

After adjusting the stocking to an acceptable level, stand growth, condition, and overall quality is improved. In addition, wildlife habitat is improved with the resulting increase of sunlight reaching the forest floor.

**Scenario Feature Measure:**

Area Treated

<b>Scenario Typical Size:</b>	55	Acre	Tot Unit Cost	\$107.11
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Chainsaw	90	Hour	\$5.64	\$507.60
Materials	Herbicide, Picloram	55	Acre	\$12.63	\$694.65
Equip./Install.	Chemical, spot treatment, single stem	20	Hour	\$55.87	\$1,117.40
Labor	Skilled Labor	110	Hour	\$31.91	\$3,510.10
Mobilization	Mobilization, Skilled labor	2	Hour	\$30.60	\$61.20

Total Cost: \$5,890.95

**Payment types:**

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$80.33	EQIP-HU	\$96.40
WHIP	\$80.33	WHIP-HU	\$96.40
EQIP-CCPI	\$80.33	EQIP-HUCCPI	\$96.40
EQIP-NOI	\$80.33	EQIP-HUNOI	\$96.40

**Practice: 666 - Forest Stand Improvement****Scenario # 2    Forest Stand Improvement - Medium****Scenario Description:****Missouri**

All materials and labor required to manipulate species composition, stand structure and stocking on forestland. Medium forest stand improvement will: Reduce basal area by 30-40 square feet per acre (or) Cut and/or kill 200 - 400 trees per acre (or) Release 21 - 40 crop trees per acre and kill any vines growing on crop trees by an approved method such as "cut stump" with herbicide to prevent resprouting. Use a current and approved Forest Management Plan for estimated basal area to be removed, number of trees needing to be cut and/or killed, crop trees needing to be released, and/or vines needing killed.

**Before Practice Situation:**

Forest stand is moderately overstocked and/or composed of an unacceptable level of undesirable species due to lack of forest management. This has negatively impacted forest health, productivity, and/or sustainability. Wildlife habitat, such as hard and soft mast production, browse, nesting cover, bedding areas, etc. is lacking.

**After Practice Situation:**

After adjusting the stocking to an acceptable level, stand growth, condition, and overall quality is improved. In addition, wildlife habitat is improved with the resulting increase of sunlight reaching the forest floor.

**Scenario Feature Measure:**

Area Treated

<b>Scenario Typical Size:</b>	55	Acre	Tot Unit Cost	\$131.70
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Chainsaw	112	Hour	\$5.64	\$631.68
Materials	Herbicide, Picloram	55	Acre	\$12.63	\$694.65
Equip./Install.	Chemical, spot treatment, single stem	26	Hour	\$55.87	\$1,452.62
Labor	Skilled Labor	138	Hour	\$31.91	\$4,403.58
Mobilization	Mobilization, Skilled labor	2	Hour	\$30.60	\$61.20

Total Cost: \$7,243.73

**Payment types:**

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$98.78	EQIP-HU	\$118.53
WHIP	\$98.78	WHIP-HU	\$118.53
EQIP-CCPI	\$98.78	EQIP-HUCCPI	\$118.53
EQIP-NOI	\$98.78	EQIP-HUNOI	\$118.53

**Practice: 666 - Forest Stand Improvement****Scenario # 3 Forest Stand Improvement - Heavy****Scenario Description:****Missouri**

All materials and labor required to manipulate species composition, stand structure and stocking on forestland. Heavy forest stand improvement will: Reduce basal area by 41 or more square feet per acre (or) Cut and/or kill over 400 trees per acre (or) Release 41 or more crop trees per acre and kill any vines growing on crop trees by an approved method such as "cut stump" with herbicide to prevent resprouting. Use a current and approved Forest Management Plan for estimated basal area to be removed, number of trees needing to be cut and/or killed, crop trees needing to be released, and/or vines needing killed.

**Before Practice Situation:**

Forest stand is heavily overstocked and/or composed of an unacceptable level of undesirable species due to lack of forest management. This has negatively impacted forest health, productivity, and/or sustainability. Wildlife habitat, such as hard and soft mast production, browse, nesting cover, bedding areas, etc. is lacking. Understory vegetation consists of mostly shade-tolerant species with little to no desirable regeneration present.

**After Practice Situation:**

After adjusting the stocking to an acceptable level, stand growth, condition, and overall quality is improved. In addition, wildlife habitat is improved with the resulting increase of sunlight reaching the forest floor.

**Scenario Feature Measure:**

Area Treated

**Scenario Typical Size:**

55

Acre

Tot Unit Cost

\$167.00

Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Chainsaw	145	Hour	\$5.64	\$817.80
Materials	Herbicide, Picloram	55	Acre	\$12.63	\$694.65
Equip./Install.	Chemical, spot treatment, single stem	34	Hour	\$55.87	\$1,899.58
Labor	Skilled Labor	179	Hour	\$31.91	\$5,711.89
Mobilization	Mobilization, Skilled labor	2	Hour	\$30.60	\$61.20

Total Cost: \$9,185.12

**Payment types:**

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$125.25	EQIP-HU	\$150.30
WHIP	\$125.25	WHIP-HU	\$150.30
EQIP-CCPI	\$125.25	EQIP-HUCCPI	\$150.30
EQIP-NOI	\$125.25	EQIP-HUNOI	\$150.30

**Practice: 666 - Forest Stand Improvement****Scenario # 4 Temporary Forest Openings (patch clearcuts)****Scenario Description:****Missouri**

Creating 2 one acre patches in over-mature and/or degraded stands using hand tools such as chainsaws. Resource concerns include: Undesirable plant productivity and health, Inadequate structure and composition, and habitat degradation.

**Before Practice Situation:**

The existing stand is overly mature and/or has been degraded in value by past harvesting practices. The level of acceptable growing stock is too low to justify managing this stand in its present condition. The present form, species composition and structure cannot meet the resource concerns and landowner objectives. Creating small openings by cutting all trees greater than 2" in diameter will foster the regeneration of high-value shade intolerant species. The work will be done with chainsaws.

**After Practice Situation:**

A new, young stand of desirable species is established In addition, early successional wildlife habitat as well as forest type diversity are created.

**Scenario Feature Measure:**

Area treated

**Scenario Typical Size:**

2	Acre	Tot Unit Cost	\$239.41
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Cost Category	Component Name	Quantity	Unit	Unit Cost	Cost
Equip./Install.	Chainsaw	16	Hour	\$5.64	\$90.24
Labor	General Labor	16	Hour	\$21.56	\$344.96
Mobilization	Mobilization, General labor	2	Hour	\$21.81	\$43.62

Total Cost: \$478.82

**Payment types:**

PayType	Unit Payment	PayType	Unit Payment
EQIP	\$179.56	EQIP-HU	\$215.47
WHIP	\$179.56	WHIP-HU	\$215.47
EQIP-CCPI	\$179.56	EQIP-HUCCPI	\$215.47
EQIP-NOI	\$179.56	EQIP-HUNOI	\$215.47